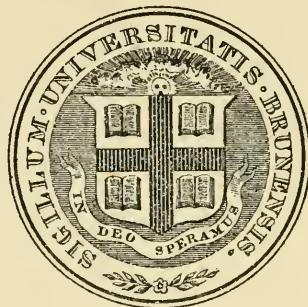


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RHODE ISLAND ARBOR DAY

MAY 14. 1920



RHODE ISLAND EDUCATION CIRCULARS

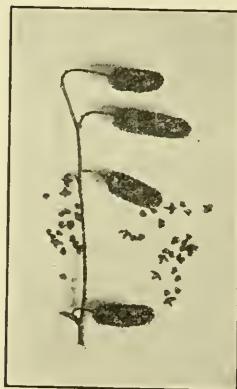
TWENTY-NINTH ANNUAL PROGRAM

FOR THE

OBSERVANCE OF ARBOR DAY IN
THE SCHOOLS OF RHODE ISLAND

MAY 14, 1920

(Edition of 70,000)



Catkins of the White Birch

THE COMMISSIONER OF EDUCATION
STATE EDUCATION SERVICE
RHODE ISLAND



WHITE OAK TREE, POTOWOMUT.
Spread, ninety feet. Girth, eleven feet ten inches.

State of Rhode Island

Department of Education

COMMISSIONER'S ARBOR DAY MESSAGE

To the Boys and Girls of Rhode Island Schools:

With the springtime comes Arbor Day and like the spring it has its old and beautiful lessons, but with a newness of truth and beauty and joy. Like other school days, it teaches you the goodness of life, or rather it causes you to think and do the things by which you grow, as trees grow, into a knowledge and power of life. Like all tree planting, the instruction of the school plants for the future. When you saved food for children beyond the sea or shared in other war activities, you went beyond the circle of your selfish interests into the larger field of doing good to others. When you plant a tree, you go beyond the circle of self and "provide a kindness for future generations."

The trees putting forth their leaves and blossoms seem to speak of earth's awakening, heralding fruitful seasons and autumn harvests and prompting us to till the soil that the earth may bring forth her food for all living creatures. The conservation and production of food are man's sacred duty; and the loyal school will not fail to encourage home and school gardens and foster a devotion to the common cause of saving and increasing the world's supply of food, clothing and shelter.

This program, like past programs, contains new and valuable things, which I hope no one of our one hundred thousand school boys and girls will miss. In "A Study of Tree Geography," "Rhode Island's Oldest Forest," and other features, you will find things to be found nowhere else and not the least of them is the distinction of your home state in its tree geography. The program renews the suggestion of last year for memorial trees and urges the continuance of the practice of planting or naming trees in honor of those who gave their lives in the war for humanity.

In all the service of Arbor Day, the planting of trees comes first. Though many of you may have no opportunity to plant a tree this year, you will keep in mind our country's need of trees and be ready as good citizens to do your part when you can find or make an opportunity. Some of you, I hope, in the years to come may even plant forests of trees and for that end cherish such aspiration from this Arbor Day until it be attained.

WALTER E. RANGER,
Commissioner of Education.

Once more the Heavenly Power
Makes all things new,
And chains the cold, and fills
The flower with dew.—Tennyson.

SUGGESTIVE PROGRAM

Theme for Arbor Day, 1920—Tree Geography.

CHORUS.	SCRIPTURE.	COMMISSIONER'S MESSAGE.	RECITATIONS.
SONG.	ESSAY—"Old Forests."	ESSAY—"Memorial Trees."	SONG.
BRIEF REPORTS ON PLANTING TREES.			
RECITATION—"The Tree of State."		SONG.	GROUP EXERCISE—"Tree Geography."
CHORUS.		PLANTING EXERCISES.	

SELECTIONS FROM THE SCRIPTURES FOR ARBOR DAY.
SYMBOLISM OF TREES

And he shall be like a tree planted by the rivers of water, that bringeth forth his fruit in his season; his leaf also shall not wither; and whatsoever he doeth shall prosper.—*Psalms i, 3.*

And now also the axe is laid unto the root of the trees: therefore every tree which bringeth not forth good fruit is hewn down, and cast into the fire.—*Matthew iii, 10.*

To appoint unto them that mourn in Zion, to give unto them beauty for ashes, the oil of joy for mourning, the garment of praise for the spirit of heaviness; that they might be called trees of righteousness, the planting of the Lord, that he might be glorified.—*Isaiah lxi, 3.*

And the rest of the trees of his forest shall be few that a child may write them.—*Isaiah x, 19.*

Clouds they are without water, carried about of winds; trees whose fruit withereth, without fruit, twice dead, plucked up by the roots.—*Jude, 12.*

The forest of the righteous is a tree of life.—*Proverbs xi, 30*

And out of the ground made the Lord God to grow every tree that is pleasant to the sight, and good for food; the tree of life also in the midst of the garden, and the tree of knowledge of good and evil.—*Genesis ii, 9.*

To him that overcometh will I give to eat of the tree of life, which is in the midst of the paradise of God.—*Revelations ii, 7.*

On either side of the river, was there the tree of life, which bare twelve manner of fruits, and yielded her fruit every month; and the leaves of the tree were for the healing of the nations.—*Revelations xxii, 2.*

HOLIDAY

When every bird on every tree
Has swung with all his might;
When flowers amid the meadow grass
Are growing in the light—
Let every heart that leaps at play,

Each butterfly awing,
Rejoice to see a holiday,
A holiday, a holiday,
A happy-hearted holiday,
Because it is the spring!—*Theodore Maynard.*

GOOD COMPANY

Today I have grown taller from walking with the trees,
The seven sister-poplars who go softly in a line;
And I think my heart is whiter for its parley with a star
That trembled out at nightfall and hung above the pine.

—*Karle Wilson Baker.*

The illustration of the front cover of this booklet is a forest view of Norway spruces planted thirty odd years ago on the "Thorncliffe" estate, Potowomut, some of which are forty feet high and a foot in diameter. The picture of the back cover shows an extensive planting of red pines on the same estate, which were planted ten years ago and have reached a height of fourteen feet.

THE GALDYS POTTER MEMORIAL GARDENS.

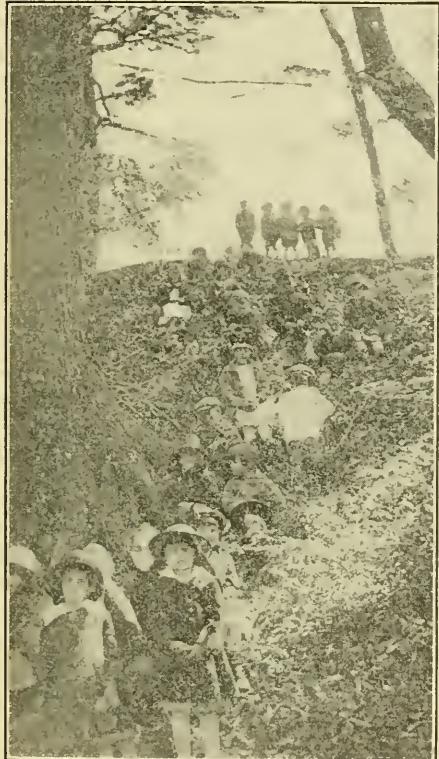
By LMBRIE PACKARD, Grade II, John Howland School, Providence.

(The Arbor Day Booklet for 1919 promised to print in the program for 1920 the best paper on the history of the Gladys Potter Memorial Gardens. The following story was judged the best paper and is printed in its original form without corrections.)

On the farm of Moses Brown long ago, when the city was young, there was a deep ravine, at the bottom of which a little stream raced and tumbled to its destination in the Seekonk River. In the course of this stream there was a pond called

Brown's Pond, where all the boys came to swim. Often on a hot summer's day, cheery calls could be heard, or on a winter day the cut of skates on ice or the resounding created by the collision of two shinny sticks. But as the time went on, as the city grew, much as a boy outgrows his coat, so Providence outgrew its old bounds. Streets were put through and houses sprang up. The trees were cut down and the spring dried up until the stream dwindled from its former size to a small listless brook. The winters were cold and the ashes piled up until finally what was left of the brook was piped up and the once beautiful ravine became an ugly city ash dump.

After some time the old ravine was filled up. Some of it was levelled off and sold for house lots. One piece of land fell into the hands of a family named Potter, who eventually gave it to the city on condition that the city make a pretty park of it within five years. Otherwise it was to become their property again. It was given in memory of their daughter, Gladys Potter, from whom it derives its name.



Children of John Howland School on Morning Walk.

LESSONS OF TREES.

What is the wisdom taught of the trees?
Something of energy, something of ease;
Steadfastness rooted in passionless peace.
Life-giving verdure to upland and glen;
Graces—compelling the praises of men;
Freedom that bends to the eagle and wren.
Largess-expanding in ripeness and size;
Shadow that shelters the foolish and wise;
Patience that bows 'neath all winds of the skies.
Uprightness—standing for truth like a tower;
Dignity—symbol of honor and power;
Beauty that blooms in the ultimate flower!

—Stephen Henry Thayer.

FOREST HOME.

O forest-mother, I have stayed
Too long away from thee;
Let me come home for these few hours
That from the world are free.
Oh! mother, they have saddened me
With all their foolish din;
Lowly I knock at thy green gate;
Dear mother, let me in.
Let all sweet winds from all fair dells,
And whispering breath of pine,
Pursue and lure the wanderer
Back to thy rest divine.—Edward Rowland Sill.

MY RHODE ISLAND

Words by W. H. PETERS.

Music by GEO. A. SLOCUM

1. Rug - ged shores, green hills, and val - leys Of my dear New Eng - land home, Where the
 2. How I love you, dear Rhode Is - land, With your bays and rock - y shore. How I

pil - grim found his ref - uge, Call me back when e'er I roam. Peaceful homes with peaceful tenants, Stalwart
 love your hills and val - leys And the o - cean's mighty roar. Bless the land of Roger Wil - liams With its

friends, both tried and true, Live in Hope and call it "What Cheer," Absent sons, it calls for you.
 homes, may peace be there; Bless the State of dear Rhode Is - land, Will for - ev - er be my pray'r.

CHORUS

Dear Rhode Is - land, land of prom - ise, Dear Rhode Is - land, when I roam, In my heart I have a

Dear land of prom - ise, When I roam,

long - ing For my old New Eng - land home; On the shores of Nar - ra - gan - sett, Where the

Shores of Nar - ra - gan - sett,

cool - ing breezes sigh, I will rest when life is o - ver, Un-der-neath Rhode Is - land sky.

Cool beezez - es sigh,

Copyright, 1918, by GEO. A. SLOCUM

THE TREE OF STATE

The Maple Tree had been a prominent citizen of the forest for many generations before he was elected by the school citizens of Rhode Island not to reign as king of the woodlands but to represent them in the democracy of trees. For a quarter of a century now he has been our Tree of State, and it is fitting that on this tree anniversary we of the schools commemorate his election and service by paying him our respects. To give us an opportunity of honoring him, he will hold a reception on Arbor Day, to which even young children are invited and it is hoped that every citizen of the schools will attend the reception, give him a proper salute and bow in loyalty before the Tree of State. He will appear in all parts of his realm and will receive each and all in forest or field, by roadside or city street.

Twenty-five years ago the Commissioner of Public Schools in his annual report gave an account of the election of the Maple Tree to the office of Tree of State. It appears that, as usually happens in popular elections, there were several candidates for the position, and that the Maple Tree, like many another candidate for office, was elected by a plurality vote and not by a majority vote, suggesting a distinction to be explained to pupils by the teacher. The Arbor Day Program observes the quarter-centenary of the Tree of State by reproducing the results of the election of the Maple Tree to that office.

Whole number of votes, 16,776.

Maple Tree	5,750	Hickory	262
Elm	5,260	Buttonwood	210
Oak	3,707	Ash	196
Chestnut	632	Cedar	191
Pine	369	Birch	189

THE MAPLE

Written for The Arbor Day Program of 1895 and dedicated to the public schools of Rhode Island by George Shepard Burleigh of Little Compton.

Exalt who will the oak and pine
To flutter in their banner's folds,
The goodly Maple shall be mine,
The glory of our rocky wolds,
That fires the spring with reddening buds,
And blazes in the autumn woods.

Its stainless blood draws sweetness in
From shining sun and dusky marl;
Its thickening foliage shrouds the din
Of whistling blackbirds, and the snarl
Of catbirds, holding back the notes
Of every songster, in their throats.

Then lift our banners to the breeze;
Our symbol Maple proudly sing;
The brightest of autumnal trees,
The first to prophesy the spring;
The State's fit emblem where began
Full freedom for the soul of man!

Observe the two-leaved germ beneath
Its horny shelter locked secure;
Unwind it gently from its sheath,
And lo, a tree in miniature!
So in the boy the future man
Is wrapped, in Nature's perfect plan.

The sturdy trunk has gnarls and coils
That gladden the aesthetic eye,
When polished by the carver's toils
To serve the boudoir's marquetry,—
For all is good, from bud to core,
To win our praise and crown our store.

"*PLL HELP YOU AND YOU HELP ME.*"

"Help one another," the maple spray
Said to its fellow leaves one day;
"The sun would wither me here alone,
Long enough ere the day is gone;
But I'll help you and you help me,
And then what a splendid shade there'll be!"

"Help one another," the dewdrop cried,
Seeing another drop close to its side;
"This warm south breeze would dry me away,
And I should be gone ere noon to-day;
But I'll help you and you help me,
And we'll make a brook and run to the sea."

—Selected.

RHODE ISLAND TREES: A STUDY IN TREE GEOGRAPHY

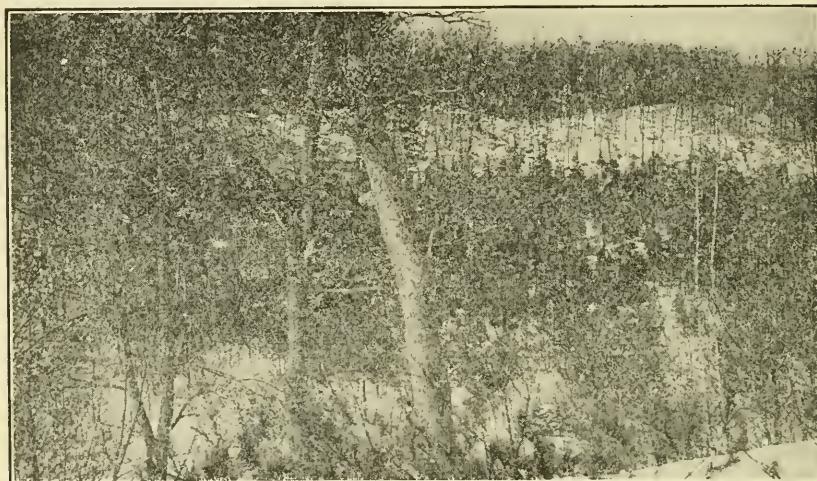
WILLIAM GOULD VINAL, A. M., Rhode Island Normal School.

At the end of the Glacial Period there were no trees in Rhode Island. It is interesting to trace their source since that time. It is not mere accident but natural causes that have determined what trees selected this part of New England for their home. The character of the climate as tempered by Narragansett Bay, the sand plains along the coast, the granite hills of the west, the moisture in the soil—in short, all of the forces that make up the environment of a tree—have had to do with the migration of trees into our valleys and up our rugged slopes. A knowledge of the sources of our generous supply of trees awakens admiration and wonder.

I. RHODE ISLAND THE MEETING PLACE OF TREES.

A. *Trees of a Northern Range.*

1. *The Black Spruce.* In the new reservoir basin at North Scituate there is a black spruce moor. As this is the only accessible area in which the black spruce occurs in Rhode Island, tree lovers should visit it before the flooding of the reservoir destroys it forever. This cold, deep bog is a refrigerating spot where the



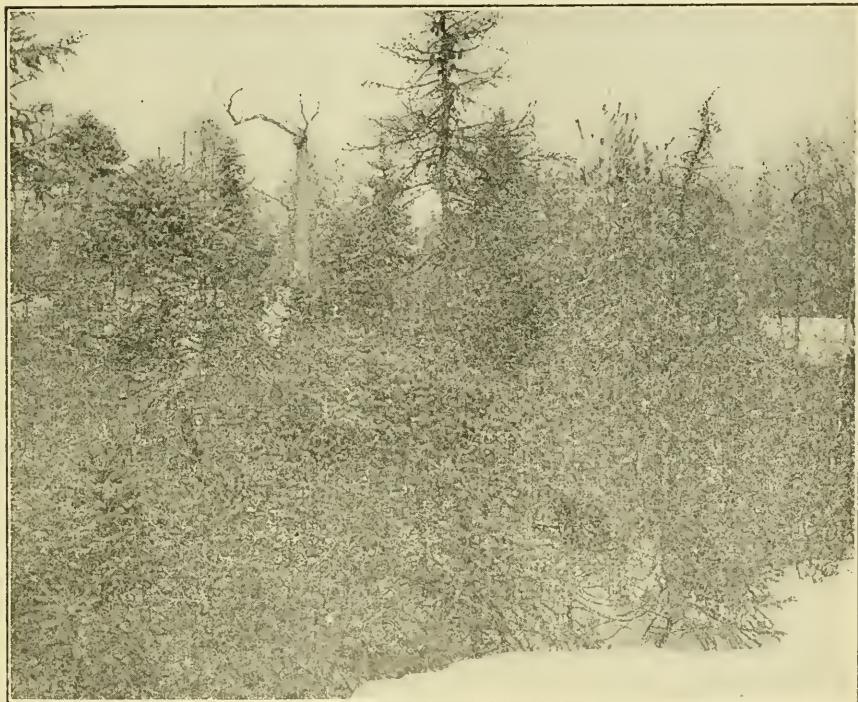
A Black Spruce Swamp at North Scituate.

roots are immersed in cold water until late in the spring. The roots cannot absorb nutrition at a freezing temperature and only certain plants are able to thrive there. Years ago the black spruce found this formation, gained a foothold on the margin, and later spread over the center. The black spruce is a northern tree and extends along the tributaries of the Yukon in Alaska. The tree is never more than 15 to 20 feet high, and bears fruit when it is two or three feet high. Sphagnum, the pitcher plant, and the creeping snowberry or moxie plum (*Chiogenes hispida*), which is common in Labrador, grow beneath this spruce. Strange is it not that we should find a bit of Klondike scenery right here in Rhode Island.

2. *The Canoe Birch.* The canoe birch is also known as the white birch and the paper birch. We often call the gray birch the white birch, but this is not correct. The canoe birch is one of our most beautiful trees. It can be easily identified by its white bark, which is easily peeled. There are considerable numbers growing wild

on Diamond Hill, and it is ornamental in our parks and private grounds. This tree comes to us from the wilderness region of Labrador. Every school child is sure to call to mind Hiawatha's request, "Give me of your bark, O Birch-Tree!" when he wished to make a birch bark canoe.

"Give me of your bark, O Birch Tree!
Of your yellow bark, O Birch Tree!
Growing by the rushing river,
Tall and stately in the valley!
I a light canoe will build me.—*From Longfellow's "Hiawatha".*



A Labrador Scene in Rhode Island. The Black Spruce Grows but a Few Feet in Height. Note the Leaves of the Leather Leaf or Cassandra Peering Above the Snow on the Lower Right Margin.

3. *The Yellow Birch.* Another essentially northern tree is the yellow birch. It has often made the members of the Maine Club feel at home in Little Rhody. Rhode Island boys and girls also have a chance to go to the "yellow birch swamp". They can recognize it by the silky lustre of the bark and by the way it curls into shreds. This tree may be seen in the Grotto of the Butler Asylum grounds and in the Metcalf Botanical Garden. This is an example of a tree that grows chiefly in a cold swamp, and like most swamp trees, is northern.

4. *The American Beech.* The beech is one of the characteristic trees of the northern woodlands. Poets and artists might find much of charm in the majestic beeches growing in the Butler Hospital ravines. The smooth steel-gray trunks make them easy to distinguish when walking through the Moses Brown Woods. And it gives a touch of the historic to know that some of our oldest beeches may have furnished shade for Roger Williams.

"Oh, leave this barren spot to me!
Spare, woodman, spare the beechen tree!—*Thomas Campbell.*

B. *Trees of a Southern Range.*

1. *The Pin Oak.* Rhode Island is the northern limit of the pin oak. The tree occurs wild in the border-land of the great Kingston Swamp and along the banks of the Pawcatuck River. The tree is more easily recognized in winter. It is a straight-trunked tree with slender branches, most of which are horizontal. It has been frequently used for ornament in Providence and may be seen in front of the Union Station, along the Blackstone Boulevard, and in Swan Point Cemetery.

2. *The Red Birch.* This is another southern tree that haunts the river borders. Its reddish, ragged bark makes it picturesque. It can be identified easily in the shrubbery of the Moses Brown School, where it forms a pleasing spectacle amongst the forsythias. There are several specimens in the Metcalf Garden.

3. *The Black Walnut.* There is some doubt as to whether the black walnut was ever native to Rhode Island. Several trees are thriving in Apponaug. There are two black walnuts on the southwest corner of Cypress and Ivy streets, in Providence. This tree grows as far south as Florida. It has been said that it takes a century for the tree to reach market size. The wood is so valuable and so much sought after that the tree has become almost extinct. The tree played an important part in the world war in furnishing wood for rifle stocks and airplane propellers. The boy who starts a black walnut farm will not only be making a good investment, but will be performing a patriotic duty, besides saving a most valuable tree for the future.

4. *The Yellow Wood.* The yellow wood is an ornamental tree, as in fact are all the other southern trees which we will mention. It grows wild in a very limited area between North Carolina and Alabama. Rhode Island people are very fortunate in being able to see this tree, especially when it is covered with its white blossoms. This rare tree may be seen in Roger Williams Park, on the Metcalf grounds, and west of the small pond in the Butler Hospital grounds.

5. *The Red Bud.* In early spring the red bud decorates the hillsides from New York to Florida. Its deep tint and profuseness suggest the peach orchard. The red bud may be seen in the shrubbery near the gymnasium of Pembroke Hall, Brown University.

6. *The Kentucky Coffee Tree.* This rather curious tree is related to our honey locust. As the name suggests, the fruit was used by the colonists of Kentucky as a substitute for coffee. This rare tree grows wild from New York south to Tennessee. Rhode Island people are fortunate in seeing this ornamental tree. One is located at Roger Williams Park, and another may be seen on the Normal School grounds, being the class tree in the spring of 1916. Another representative hangs over the wall on Power street, near Brown street.

7. *The Catalpa Tree.* The catalpa was once confined to the south, but is now naturalized in Rhode Island. It is quite common in our parks and along our streets. One street is called Catalpa Road. The tree is also known as the Indian Bean, Candle tree and Bean tree.

C. *Trees from Abroad.*

When Roger Williams came, all our plants were native. The region was a wide expanse of forests, and beneath them were tender wood-loving plants such as the ladies' slipper and the Jack-in-the-pulpit. The coming of the colonists upset the flora, and as civilization advances trees disappear and along with them native plants. The killing off of native species gave chance for foreign plants. As the forests of Europe were largely destroyed ages ago, the plants are those of

the open and their coarse hardy features have been inbred for years. The introduction and thrift of such European plants as dandelion, mallow, plantain, chickweed, burdock, mullein, sorrel, yarrow, and toadflax are indications of the passing of our forests.

Along with the weeds have come various trees. One may take a "tree trip abroad" in Providence. Some of the more commonly introduced species are mentioned.

1. *Fruit Trees.* The *apple*, *pear*, and *quince* were introduced to America from the Old World. They were brought on account of their fruit value. The apple frequently escaped from cultivation, and in old pastures has assumed a bushy character and is often protected from cattle by thorn-like branches. The fruit reverts to its ancestral, wild flavor when growing under these conditions.

"High o'er the mead-flowers' hidden feet
I bear aloft my burden sweet."—*The Pear Tree—William Morris.*

Rhode Island might well be called the cradle of the apple industry of America. The first horticulturist of this part of the country was William Blackstone. His orchard was planted in a region which is now a part of Rhode Island. He is said to have originated a new species of apple. The state is a natural orchard area, and produces finely flavored fruit, as proved by the Rhode Island Greening. The southern slopes of the hills and land suited for farming but not so used, should be covered with orchards. A generation ago no one would dream that apples would cost more than oranges in our markets. The demand is becoming greater. The population of Rhode Island has been vastly increased, but the production of apples is constantly decreasing. This is largely due to the neglect and destruction of old orchards. We can no longer rest on the reputation of past history. The time is ripe for progressive action in Rhode Island fruit growing.

"Ho! The little-red-apple Tree!
Sweet as its juiciest fruit
Spangled on the palate spicy,
And rolled o'er the tongue to boot,
Is the memory still and the joy
Of the Little-red-apple Tree,
When I was the little-est bit of a boy
And you were a boy with me!"—*James Whitcomb Riley.*

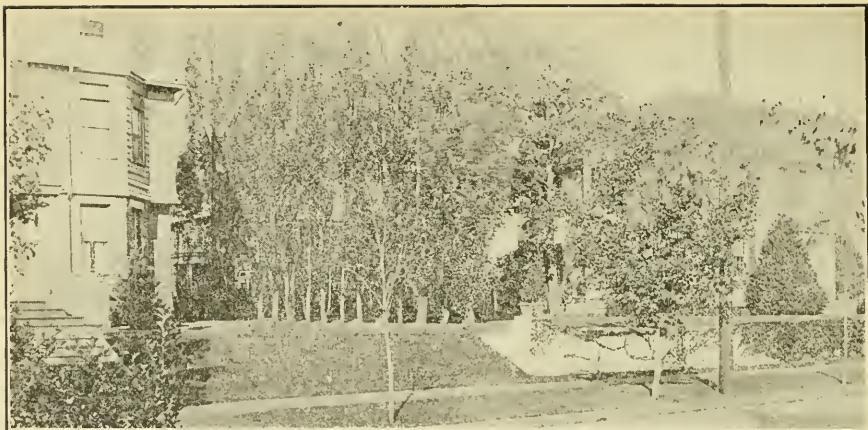
2. *The Beeches, the Purple, Fern-leaved, and Weeping Beech.* These are all varieties of the European Beech. They may be seen at Roger Williams Park and elsewhere.

3. *Maples from Europe, the Norway and Sycamore Maples.* These introduced maples are common along our streets and in our drives. In winter one may distinguish them by the red buds of the Norway and the green buds of the sycamore. The leaf-stem of the Norway maple has a milky juice.

4. *European Poplars, the Lombardy and the Silver Poplars.* The Lombardy Poplar is supposed to have originated in Lombardy. It also is native to the mountains of Afghanistan. It never produces seed in America, and has to be reproduced by cuttings just like a geranium. It may be readily distinguished by the vertical growth of its branches. The tree is very common in Providence. There is a conspicuous hedge or screen of Lombardy Poplars on the Blackstone Boulevard, and another on the State House grounds.

The Silver or White poplar is so-named because of the white down on the under side of its leaves. The tree was brought to Rhode Island by the early colonists, and thickets of these trees often mark the yard of an old homestead which has long since disappeared. This tree is more apt to frequent the older villages and farms.

5. *Other Tree Immigrants from Europe.* Specimens of the beautiful *English Elm* may be seen on College Hill, near 54 College street, and on Benefit street,



Poplars from Lombardy Make a Quick Growing Hedge.

near Power street. The spring class of 1917 planted an *English White Oak* on the Normal School grounds. Another tree of this species is on Benefit street, near Star street. Several large *Yellow Willows*, a handsome winter tree, grow at Nayatt. *Austrian Pines* may be seen at Roger Williams Park, and in front of the former Morris Heights School building on Morris avenue, Providence.

6. Tree Settlers from Asia.

The Ginkgo. This oriental tree is said to have traveled from China to Japan, thence to England and thence to America. It may be recognized by its fan-like leaf, which has given it the name of Maidenhair Tree. It is a sacred tree in Japan. There are several of these trees in front of the Providence Public Library and along the Blackstone Boulevard near Swan Point. It is a relative of the pines and spruces, but like the larch sheds its leaves.

The Chinese Chestnut. This tree has been introduced to take the place of our American Chestnut, which is threatened with extermination by the chestnut blight. There are several in the nursery at Roger Williams Park, and two were planted in the spring of 1915 on the Normal School grounds.

"The gray hoss-chestnut's leetle hands unfold,
Sofern a baby's be a three days old."—Lowell.

Horsechestnut. The horsechestnut tree is a native of southern Asia. Anna Botsford Comstock writes: "The wealth of children is, after all, the truest wealth in this world; and the horsechestnuts, brown and smooth, looking so appetizing and so belying their looks, have been used from time immemorial by boys as legal tender—a fit use, for these handsome nuts seemed coined purposely for boys' pockets." Every Providence boy knows the location of a horsechestnut tree. Bowen street is noted for its horsechestnut shade trees,

Ailanthus Tree. The ailanthus or Tree of Heaven came from China. It is quite extensively planted in parks and private grounds throughout the city. It probably has the largest leaf of any tree in Rhode Island, often reaching a length of three feet. The name Chinese Sumach tells the character of the leaf. The tree was first planted in 1820 on Long Island, and was probably literally blown

into Rhode Island, as its winged seeds were wafted on a favoring wind.

The Peach Tree. This tree came from Asia. We have already seen how many of our fruit trees originated in Europe. In Japan cherries and peaches are cultivated as ornamental trees.

White Mulberry. The white mulberry is probably a native of China. It is interesting to know that the leaves are fed to silkworms and the tree has gone westward or in advance of the silkworm. The tree reached England in the early part of the 17th century, and America about 1830. It grows on Copley Lane in Providence and near the Arbor Vitae hedge in the Metcalf Botanical Garden.

II RHODE ISLAND CROSS ROADS OF TREES.

A. *The Sandy Trail.* It is thought by some botanists that after the Glacial Period Nova Scotia, Cape Cod, Southern Rhode Island, and New Jersey formed part of a sandy coastal plain. Georges Bank would have been dry land at that time. Since that time the New England coast has been slowly sinking and the plants of the ancient coastal plain have retreated to these sand area pockets. Consequently similar plants are isolated in these regions. The ancient coast area former a north and south sand plain for the migration of plants that could adapt themselves to that kind of a soil. Many of our coastal trees, therefore, skip the rockbound coast of Cape Ann, New Hampshire and Maine to reappear in the land of Evangeline, or toward the south show up on the sandy stretch of Cape Cod, on Nantucket and Marthas Vineyard, east of New London, and in New Jersey.

1. *The American Holly.* In Rhode Island the holly is common in South Kingston and Little Compton. It follows the coast into the sand areas south of Boston, to Quincy and Norwell. The tree's habitat extends south to Florida. There is danger of its being exterminated in Southern New England, as great quantities are sent to market in Boston and Providence during the Christmas season.

2. *The White Cedar.* The white cedar is very common in the Kingston Swamp. There are a few stands as far north in the state as Rumford. It is very rare north of Boston except at Cape Breton Island and in Nova Scotia, where it is found quite abundantly. The tree is found along the coast south to Florida. Associated with cedar bogs and ponds is the sedge spike rush (*Eleocharis interstincta*), which follows the coast into the tropics, actually growing in Cuba and the Isle of Pine.

3. *The Post Oak.* The post oak is found along the shore at Wickford. It grows on the same sort of sterile soil on Cape Cod as far as Brewster. It is not mere chance that the post oak and pitch pine do not grow on Block Island. The island has sand dunes in one part, but in the main it is a great block of clay. The tree is found southward to Florida, obtaining a greater size as it nears the more favorable climate of the south.

B. *The Granite Way.* The granite hills of the western part of the state form a cross road to the south for the trees that prefer the granite soil. These same trees are found in the granite areas of Labrador, along the granite coast hills of northern New England and across Rhode Island, and then follow the Appalachian ridges to North Carolina. They find the same climate on the mountain tops of the south that prevails in the lowlands of the north.

1. *Mountain Maple.* This tree is found in Nova Scotia and along the mountains to Georgia. It is occasional in northern Rhode Island. We are not all fortunate enough to spend our vacations in mountainous New England or in Nova Scotia, but we still have the opportunity to admire this beautiful colored maple.

2. *Mountain Ash.* The mountain ash is not a relative of the ash, but belongs to the rose family. It is very beautiful in the autumn, when its fruit becomes a bright red. This tree grows in cool swamps and on the mountain slopes of the north, and is found occasionally in the northern section of Rhode Island, extending along the mountains to North Carolina.

3. *The American Larch, and Fir Balsam.* These two conifers prefer cool swamps and grow as far north as the Arctic Circle. From Labrador they extend along the mountains to New Jersey and Pennsylvania, being absent along the coast. The larch grows in the Moses Brown grounds and in the Metcalf Garden.

"Give me of your roots, O Tamarack!
Of your fibrous roots, O Larch Tree!
My canoe to bind together,
So to bind the ends together,
That the water may not enter,
That the river may not wet me!"—*Longfellow, in Hiawatha.*



JUNIPER.
(Native to R. I.)

PIN OAK.
(From the South)

UMBRELLA PINE.
(From Japan)

SPRUCE.
(From the North)

Rhode Island is the Meeting Place of Trees. It might well be said that they come "From Greenland's icy mountains to India's coral strand."

4. The *Hemlock, White Pine, Red Oak, American Hornbeam, and Black Birch* are other trees which have crept in from the north. They prefer to occupy the cool spots and grow south along the Alleghanies to Georgia. All of these trees except the hornbeam may be seen at Roger Williams Park.

"This is the forest primeval. The murmuring pines and the hemlocks,
Bearded with moss, and in garments green, indistinct in the twilight,
Stand like Druids of old, with voices sad and prophetic,
Stand like harpers hoar, with beards that rest on their bosoms."—*Longfellow.*

III. A TYPICAL TREE WALK IN RHODE ISLAND.

We have just learned that Rhode Island has a cosmopolitan forest. Its conditions of soil and climate make it a natural assembly ground for trees. A tree walk in Providence will give us an idea of a tree census and the value of such a census to our citizens.

This tree walk will start at the corner of Barnes and Prospect streets and will continue along the south side of Barnes street. On the opposite corner is a broken down elm tree. Note the woodpecker's home. He learned that the tree was dead some years ago by tapping it and decided to set up housekeeping. Just back of this tree are two old cherry trees. The forester would say that they have been "dehorned". This is a harsh treatment and it is doubtful if they will recover, and it certainly does not improve their appearance.

1. The large tree under which we stand is a *Norway Maple*. Look at the deep furrows running up and down the trunk. The fruit stalks in the top of the tree show that it had many "keys" last year. Can you find any seedlings which have come from the fallen seeds? Find a seedling two years old.

2. This is a *sugar maple*. Compare the size of the twigs with those of the Norway maple. How does the bark differ?

3. *Silver Maple*. The bark of the silver maple is scaly.

4. *American Elm*. The flower buds make black spots against the sky.

5. This is a *Maple*. Look back and see which one of the three maples it most nearly resembles. In back of this are *pear trees*.

6. We have just seen this kind of a tree. What is it?

7. What kind of a maple is this?

8. Examine the trunk and name this tree.

9. *Yellow Wood*. What other trees have we seen that came from Europe? In the yard in back of this tree is an evergreen with large leaves. It is the rhododendron, which is the state flower of West Virginia. What is our state tree? To the left of the evergreen is a *magnolia*. Note the large buds. What will come from them? There are *pear trees* in back of the magnolia.

10. *Horse chestnut*. From what continent were the horse chestnuts introduced? This is an example of tree dentistry. Why was an operation performed on this tree? What material was used for filling? Why? Find some of last year's leaf stems on the ground. Carefully bend a limb down and find the places where the leaves were attached. What kind of a fruit tree is in back of the horse chestnut?

11. *Sugar Maple*. Note something unusual about the large limbs in the top of this tree. This was done during the winter. What do you suppose did it? How many limbs were affected this way last winter?

12. *American Elm*.

13. What kind of a maple is this? What state is noted for this kind of tree?

14, 15. What are these trees? Find a bird box on the elm on the opposite side of the street.

Cross Brown street, keeping on the same side of Barnes.

1. Note the young elm with a *forsythia* beneath it in the corner of the yard.

2. This is a large _____. How many main trunks does it have? In what direction do the ends of the twigs point? This is one way to tell this tree. What makes the knot-like appearance on the twigs? Look at the small white birch or canoe birch in the back of the yard.

3, 4, 5, 6, 7. These trees are sometimes called rock maples. They grow in

"orchards" in northern New England. What name have we already given these trees?

8. The buds will tell you the name of this maple. Observe the three clusters of Gypsy moth eggs on the northern side of the tree. What is the advantage of their being on the underside of the limb?

9. Name this maple.

10. Observe the buds and name this tree.

11, 12. What are these trees? Note the Norway maple across the street.

Moses Brown Walk. Just inside the gate is an elm. To the far left by the shrubs is a young blue spruce. To the right by the tennis court is a pignut hickory. Along the left of the path alternate sugar maples and Lombardy poplars. Which have brancies curving sharply upward? Which are taller? These trees grow faster and when they become old and decrepit they will be cut down and the tops of the sugar maples will spread across the open spaces. Find an elm with a squirrel's winter home. On the right is a black oak with one main trunk. It has kept some of its leaves on all winter. This is characteristic of oaks. On what part of the tree have the leaves remained? Why are there none in the other part? Note the white oak with many wide-spreading limbs which are lighter than the black oak. In back of this tree in the shrubbery are several red or river birches. Suggest how they got their names? Next we come to an old apple tree. Note the pruned limbs which have commenced to heal. This is called tree surgery. Note the lines of small holes on the large limb which leans easterly toward the flag pole. These holes were made by the sap-sucker. This bird is a kind of wood-pecker and is related to the flicker whose home we saw on the beginning of the trip. The large, dark tree over on the left is a larch. It sheds its leaves, but the cones show that it is a conifer.

IV. THE RHODE ISLAND TREE UNIVERSITY.

You must now realize that every Rhode Island community is an arboretum with trees from the North, trees from the South, trees from across the Atlantic and trees from the Far East. A great collection of trees is here. The next step in a well-organized arboretum is to label the trees. This spring many classes will make graduation gifts. Why not label a few trees? Let us make Arbor Day, 1920, a notable event by founding the Rhode Island Tree University. I know of nothing so inexpensive that will bring such satisfactory returns on the investment. To know our trees is the beginning of life-long acquaintances. To be interested, to be able to call them by name, to protect them—mean increasing civic pride. Such a gift will endow an educational system that not only works during school time but after hours and through vacations. It will afford an extension course for all the time for all the people.

TO TEACHERS

The Arbor Day Program renews its earnest invitation to teachers to contribute material for future numbers. While it takes freely from the literature of the past and the current press the best thoughts of trees and their kindred in nature's family, nothing is quite so useful for the observance of Arbor Day as the actual experiences of pupils and teachers. If the program is to be of the highest value to schools, it must follow the common practice of schools in stimulating the self-expression of pupils and in reliance on what they think and do as true educational method. This is the reason why pupils and teachers are invited to help make an Arbor Day program not only for themselves but also for others. Some

of the best things in past programs have come from pupils through their teachers. To follow Mr. Vinal's suggestions for nature study, as given in this and other numbers, and to respond to his invitation to enter the "Tree University" will help make our Arbor Day service more vital and enhance nature study among pupils.

For sending in the work of pupils, teachers are reminded that neither perfect work nor the best only is desired exclusively. While high ideals of school work are to be kept before pupils, there is another important principle in public education. In an education common to all, the modest or imperfect work of any pupil is real attainment. Not only the best work of a few but the work of all the pupils is to be accounted as gain for an intelligent and loyal citizenry. The common work of pupils often has an inspiration for many, because it is something they can do. To represent in the Arbor Day program the things some pupils have done and others may do and thus to reproduce the real experiences of pupils cannot fail to enrich its pages and prompt thought and action in many others.

For these reasons teachers are urgently requested to co-operate with Mr. Vinal in his efforts for the children and youth of Rhode Island. For the coming year he suggests reports and pictures relating to the "Rhode Island Tree University." The Commissioner will welcome from teachers accounts of their exercises for Arbor Day, their favorite selections, new songs, articles and suggestions for the making of future programs. Teachers who will help in these matters will be serving children and youth they have not seen.—*The Commissioner of Education.*

THE SERVICE OF THE TREES.

"Homes!" said the forest shagging the range,
 "Lintel and floor, roof-beam and door,
 Homes we build and deserts we change
 To cities that smoke and roar.
 Steel and stone may come to their own,
 But first we shaped and prepared for these.
 We raise the world, who are overthrown.
 We rise and toil!" said the trees.

"Ships!" said the forest, tossing its plumes.
 "The weltering tide we master and ride;
 Oceans and smoke with hurricane dooms,
 All ports of the world beside.
 Iron and steel may set their seal
 On hull and keel, with clanging boasts.
 We have won a world to unveil and reveal
 All continents and coasts!"

"Beauty!" the forest in silver light
 Breathed dim and strange through the sunset change;
 Star-crowned, striding along the height
 Lord of the lofty range.
 "No stone takes lines of such vast designs
 No steel such immortal mysteries!
 From the birch by the lake to the mountain pines,
 We dwell with God!" said the trees.—*W. R. Benet.*

Words used by kind permission of
Youth's Companion.

Pussy Willow's Secret.

Eleanor Smith.

Allegro.

1. Pus - sy. Wil - low had a se - cret That the snow - drops whis - pered her,
2. And these dropped it to the wood - brooks Brimming full of melt - ed snow.

And she purred it to the south - wind While it stroked her vel - et fur;
And the brooks told Rob - in Red - breast As he chat - tered to and fro;

And the south - wind hummed it soft - ly To the bus - y hon - ey bees,
Lit - tle the Rob - in could not keep it So he sang it loud and clear.

And they buzzed it to the blos - soms, On the scar - let ma - ple trees,
To the sleep - y fields and mead - ows: "Wake up! cheer up! spring is here!"

RHODE ISLAND'S OLDEST FOREST.

MARION D. WESTON, PH. D., Rhode Island Normal School.

Long before Roger Williams came to what is now Rhode Island, long before there were any Indians here or, for that matter, human beings anywhere in the world, even before the great ice sheet covered New England, the Narragansett Basin region was a vast swamp with a dense forest of strange trees. The record of this forest is found in many places in the state from Pawtucket and Central Falls to Newport. In the great piles of dark gray rock which were thrown up when the Portsmouth coal was mined it is still possible to pick up fossil pictures of small portions of these old-time plants. By far the clearest impressions, however, were dug out from the interior of the East Side Hill when the excavations



Rhode Island's Oldest Forest.

for the tunnels were made. From records such as these the general appearance of the forest has been imagined.

The land was low and swampy, with the stagnant water filling the pools. The tall trees growing on the drier hummocks were quite unlike any of our modern forms. Their trunks were marked with curious but very distinct patterns arranged in straight lines or spirals. These scars, like the markings on the horse-chestnut bark, were caused by the fall of the leaves, which, in the case of these queer old trees, were like stiff grass blades. At the base the trunks divided into four or more great holdfasts, which sprawled out beneath the mud in all directions. No trees like them are found anywhere in the world today but, strange to relate, some tiny, dwarfed descendants of these old-time giants are found in woodlands in many parts of the state. The little trailing evergreens (club mosses), such as Creeping Jenny or Prince's Pine, which are used in wreaths at Christmas time, but almost forgotten for the rest of the year, are of far more noble lineage than our much admired forest monarchs.

Close beside the stagnant pools grew dense thickets of tall, bamboo-like trees with jointed stems and dainty circles of delicate leaves. Although these ancestors

of the modern horsetail were 100 feet or more in height, they closely resembled, in other respects, the forms of today. The 10-inch high stems common in early spring in sandy places along the railroad tracks, are jointed and furrowed precisely as the great stone trunks which have been found in the East Providence sandstone quarry. The common horsetail sends up a yellowish brown branch tipped with a cone, and later, after this form has died down, a green, fluffy branch comes up from the same underground stem, which suggested the name horsetail (*Equisetum*) for the family. Another modern member of the group is the scouring rush, which grows to a height of three feet or more in moist places. The stiff stems were used by housewives of colonial times much as scouring soaps are used today. The insignificant green leaves which encircle the branches of these modern horsetails are not as beautiful as the dainty circles of leaves on the smaller branches of the ancient horsetail trees.

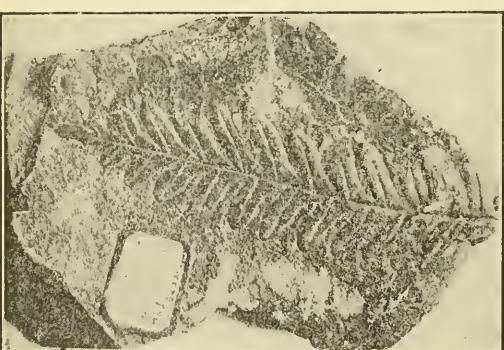
It is wonderful to think that the impressions of such delicate structures could have been preserved so perfectly, yet no fossils are more common in Rhode Island.

Fossil Showing Leaves of Ancient Horsetail.

The third kind of tree would not seem strange to us if we lived in a moist, tropical land, for tree ferns are still found in some parts of the world. Many of these little trees which looked like ferns were in reality members of another group long since extinct. These fern-like trees produced true seeds and not the tiny spores which are found in the fruit dots on the under surfaces of many of our familiar ferns. The delicate fern-like foliage, which is probably the best known of any of the Rhode Island fossils, sometimes grew on small trees and sometimes in large clumps close to the ground.

This oldest of Rhode Island's forests had no brightly colored flowers to relieve

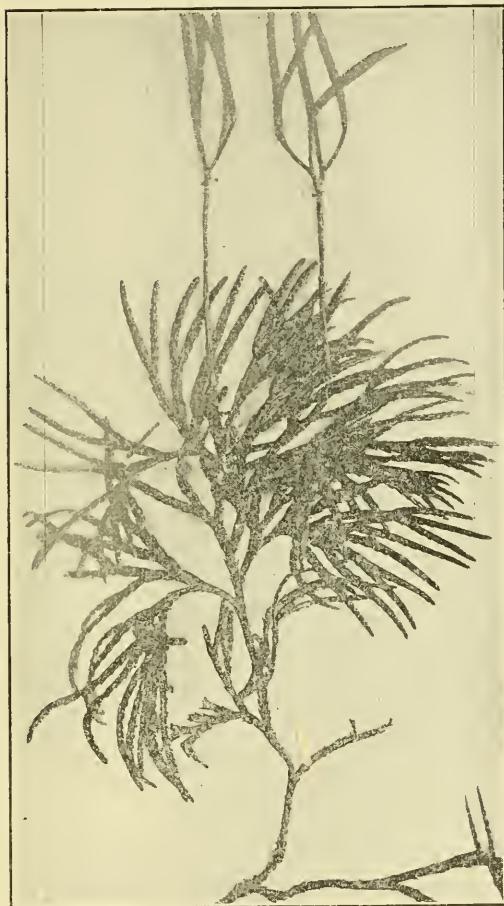
the monotony of the rather somber coloring, no grass in the open spaces to conceal the dark mud, no sound of bird song, for those were the days before there were any birds, no squirrels running about the trees. The animal life was as strange as the plants, for huge dragonflies darted about with their great wings, two feet across, whirring like small airplanes. Low croaking sounds came from huge lizard-like creatures as they glided stealthily into the silent



Fossil Showing Fernlike Foliage.

pools. The air was thick with clouds of pollen dust floating down the treetops. There is no record of such a forest anywhere else in New England. Large areas in Pennsylvania, however, were covered with similar forests which have left this country an invaluable gift in the form of coal. Scientists tell us that it is the tiny parafin-covered spores and pollen grains produced in lavish abundance by the ances-

tors of the club mosses, which make this coal so valuable as fuel. If this is true we must look with new respect at the trailing evergreens as representatives of mighty ancestors which, back in the dim ages of the coal period, were preparing a priceless gift for the human race.



Creeping Jenny.

An oak-tree is to us a moral object because it lives its life regularly and fulfills its destiny. In the wind and in the stars, in forest and by the shore, there is spiritual refreshment.—“*The Holy Earth*,” by L. H. Bailey.

PLANTING A TREE.

What does he plant who plants a tree?
A scion full of potency;
He plants his faith, a prophecy
Of bloom, and fruitfulness to be;
He plants a shade where robins sing.
Where orioles their nestlings swing
A Burning Bush,—a miracle!
Who plants a tree,—he doeth well!

What does he plant who plants a tree?
He makes a strong mast for the Sea;
He makes the earth productive, fair;
He helps the vines climb high in air,
And from their censers shed perfume
To sweeten light, and bless high Noon.
Against the vandals who despoil
He sets his protest in the soil.

What does he plant who plants a tree?
An emblem of the Men to be:
Who lightly touch terrestrial clay,
But far above the earth, away
From sordid things and base,
Incarnate ideals for their race,—
Who plants a tree, he doeth well,—
Performs with GOD, a miracle!

—*The Forest Poetic.*

WINDS OF MARCH.

An hour before the frosty dawn
I heard across the snow
From spaces filled with flying cloud
The wild wind bugles blow
The reveille for seeds and roots
Entombed in white below.

They sounded the assembly to
The squirrel in the tree,
The darkly confined butterfly,
The hibernating bee,
The caterpillar in his shroud
Of silken tapestry.

They called the robin back to build
In maple, elm and larch,
The wild goose to the viewless track
Across the azure arch,
And played upon the farmer's door
“Ho! ploughman, forward, March.”

—*Minna Irving.*

Every pine and fir and hemlock
Wore ermine too rich for an ear,
And the poorest twig on the elm-tree
Was ridged inch-deep with pearl.

—*James Russell Lowell.*

“Of dire portent is the destruction of our forests now going on, warning us of the awful fate that threatens us in the next two hundred years at farthest. Unless there is careful conservation and reforestation, there will be no forests left. And the end of our forests is the end of our supremacy as a nation, very likely the end of our civilization, and more than possibly the end of our existence itself; for we are absolutely dependent on wood.”

THE TREE.

I love thee when thy swelling buds appear
 And one by one their tender leaves unfold,
 As if they knew that warmer suns were near,
 Nor longer sought to hide from Winter's cold;
 And when with darker growth thy leaves are seen
 To veil from view the early robin's nest,
 I love to lie beneath thy waving screen
 With limbs by summer's heat and toil opprest;
 And when the autumn winds have stript thee bare,
 And round thee lies the smooth, untrodden snow,
 When nought is thine that made thee once so fair,
 I love to watch thy shadowy form below,
 And through thy leafless arms to look above
 On stars that brighter beam when most we need their love.

—*Jones Very.*

THE VOICE OF SPRING.

I come, I come! ye have called me long,
 I come o'er the mountains with light and song!
 Ye may trace my step o'er the wakening earth,
 By the winds which tell of the violet's birth,
 By the primrose-stars in the shadowy grass,
 By the green leaves, opening as I pass.

I have breathed on the south, and the chestnut flowers
 By thousands have burst from the forest-bowers,
 And the ancient graves, and the fallen fanes,
 Are veil'd with wreaths on Italian plains;
 But it is not for me, in my hour of bloom,
 To speak of the ruin or the tomb!

I have lock'd o'er the hills of the stormy north,
 And the larch has hung all his tassels forth,
 The fisher is out on the sunny sea,
 And the reindeer bounds o'er the pastures free,
 And the pine has a fringe of softer green,
 And the moss looks bright where my foot hath been.

I have sent through the wood-paths a glowing sigh,
 And call'd out each voice of the deep blue sky;
 From the night-bird's lay through the starry time,
 In the groves of the soft Hesperian clime,
 To the swan's wild notes by the Iceland lakes,
 When the dark fir-branch into verdure breaks.

From the streams and founts I have loosed the chain,
 They are sweeping on to the silvery main,
 They are flashing down from the mountain brows,
 They are flinging spray o'er the forest-boughs,
 They are bursting fresh from their sparry caves
 And the earth resounds with the joy of waves!

Come forth, O ye children of gladness, come!
 Where the violets lie may be now your home.
 Ye of the rose lip and dew-bright eye,
 And the bounding footstep, to meet me fly!
 With the lyre, and the wreath, and the joyous lay
 Come forth to the sunshine, I may not stay.

Away from the dwellings of care-worn men,
 The waters are sparkling in grove and glen!
 Away from the chamber and sullen hearth,
 The young leaves are dancing in breezy mirth
 Their light stems thrill to the wild-wood strains,
 And youth is abroad in my green domains.—*Felicia Hemans.*

THE HEART OF A TREE.

What does he plant who plants a tree?
 He plants the friend of sun and sky;
 He plants the flag of breezes free;
 The shaft of beauty, towering high;
 He plants a home to heaven anigh
 For song a mother-croon of bird
 In hushed and happy twilight heard,
 The treble of heaven's harmony—
 These things he plants who plants a tree.

What does he plant who plants a tree?
 He plants cool shade and tender rain,
 And seed and bud of days to be,
 And years that fade and flush again;
 He plants the glory of the plain;
 He plants the forest's heritage;
 The harvest of a coming age;
 The joy that unborn eyes shall see—
 These things he plants who plants a tree.

What does he plant who plants a tree?
 He plants, in sap and leaf and wood,
 In love of home and loyalty
 And far-cast thought of civic good—
 His blessing on the neighborhood
 Who in the hollow of His hand
 Holds all the growth of all our land.
 A nation's growth from sea to sea
 Stirs in his heart who plants a tree.—*The Forest Poetic.*

PEACE GARDENS

The peace garden is as necessary now as the war garden was when American soldiers were fighting in France.—*Providence Journal*, 1920.

If God created the earth, so is the earth hallowed; and if it is hallowed, so must we deal with it devotedly and with care that we do not despoil it, and mindful of our relations to all beings that live on it. . . . The place whereon thou standest is holy ground.—“*The Holy Earth*,” by L. H. Bailey.

ARBOR DAY SONG.

S. F. SMITH.

Author of "My Country, 'Tis of Thee."

GEO. EDGAR OLIVER.

Maestoso.

1. Joy for the sturdy trees! Fanned by each fragrant breeze,
2. Plant them by stream or way, Plant where the children play,
3. God will his blessing send; All things on Him depend;



Love-ly they stand! The song-birds o'er them thrill, They shade each
 And toil-ers rest; In ev-ry verdant vale, On ev-ry
 His lov-ing care Clings to each leaf and flow'r Like i-vy



tink-ling rill, They crown each swell-ing hill, Low-ly or grand.
 sun-ny swale, Wheth-er to grow or fail,—God know-eth best.
 to its tower; His pres-ence and His power Are ev-ry-where.



From "Academy Song Book," Ginn & Co.

MEMORIAL TREES.

In the times of our country's struggle for free government many a tree was dedicated as a "Liberty Tree." Among other memorials, the world victory, which the might of right has won, may be fittingly commemorated by the planting or dedication of victory trees. The use of trees as memorials prompted the special feature of this Arbor Day program, with the suggestion that schools plant or dedicate trees to the memory of those who have sacrificed their lives for their country in the world war. That schools may do this, arrangements were made the past autumn to secure the names of these patriots of the towns and cities of Rhode Island. This roll of honor, containing the names of five hundred and eighty-five appears in the Independence Day program, in which I have already suggested that each school prepare and preserve a memorial roll of its past members who have died in defense of our nation's rights and honor. To plant or dedicate a tree in memory of each of its own heroic dead is a fitting and beautiful tribute from school or community. Such tender service is a new opportunity for teachers and pupils and will enrich the meaning of Arbor Day with new thoughts and new service.—*From Commissioner's Message, 1919.*

ROLL OF HONOR.

The roll of honor, to which reference is made in the preceding paragraph, has been reproduced, with correction and arrangement by towns and cities, in the Independence Day booklet for May 4, 1920.

PLANT A TREE.

If when I am gone
Thou wouldest honor me,
Then plant a tree.
Some highway, bleak and bare,
Make green with leaves.
So radiant and fair
And full of leaves, my monument will be
So ever full of tuneful melody.
My monument will be
A sight most rare—
Trees planted everywhere.
A highway broad from city to the sea,
Plant this in memory of me.

—*David H. Wright.*

PLANT A BEECH.

Plant a beech tree when I die,
With its arms held to the sky.
Plant it firm and plant it deep,
Somewhere, when I fall asleep,
Should a bird for Love's dear sake,
In the boughs a warm nest make,
Or a squirrel, blythe and gay,
Through the silvered branches stray,

I am sure that grateful tree,
Welcome words will give from me,
For a beech tree, gnarled and strong,
Echoes my home-loving song.

Plant a beech tree when I go
Into God's White Fields of Snow,
Plant it where the red bird calls,
Where the sunshine softly falls.
Plant it where the fireflies,
Bees, and men with tired eyes,
Turn to rest on living green,
Finding hope and light serene.

When I rest, I know I'll know
If my beech tree branches grow,
If they make a home for Love,
Arched by starry skies above,
Or if birds go there to sing,
Or the bees on golden wing,
Or a squirrel seeks its shade,
Sheltered, safe and unafraid.

Plant a beech tree kissed by sun,
When my sands of Life have run,
And my soul, if souls are free,
Hovering, will find that tree.

—*Lottie Belle Wylie.*

AMERICAN TREES IN FRANCE AS MEMORIALS.

On the battlefields where American soldiers gave their lives for the freedom and safety of humanity, France is planting American trees sent by the American Forestry Association. Large quantities of the seeds of different trees, sent by the association, have been received and gratefully acknowledged by the French Minister of Agriculture. They will be planted for the reforestation of regions devastated by war. Thus in years to come America will have the finest of all memorials on the battlefields where her sons answered the call of humanity—the loving, growing trees of America.

OLD TREES.

Old trees! old trees! in your mystic gloom
There's many a warrior laid,
And many a nameless and lonely tomb
Is sheltered beneath your shade.
Old trees! old trees! without pomp or prayer
We buried the brave and the true,
We fired a volley and left them there
To rest, old trees, with you.—*Abram J. Ryan.*

HAIL, KINDLY CEDARS! HAIL!

Oh, here's a glee to the cedars,
 Our stanch old friends and true!
 What boots the snow, when the wild winds blow;
 For never a change do the cedars know
 All the long years through.

And here's a lilt to the cedars,
 Sturdy of frame and mien,
 Where the lordly oak-tree's pride is fled;
 And he stares as a Gorgon, stark and dead,
 There be the cedars green.

A toss of my cap to the cedars!
 The lovingest trees that be,
 The time-tides roll and the seasons veer,
 Yet tenderer, sweeter year by year,
 My cedars are true to me.

A parting word to the cedars!
 For a friend of the cedars I,
 They'll give in death what in life they gave,
 When they keep their vigils near the grave
 Where under the sod I lie.—*William Frederick Held.*

THE DEATH OF THE TREES.

Every lover of trees regrets to see the cutting down of the elms on the lawn of the First Baptist Church. For some years death has threatened them, an untimely death, too; and it is a disquieting reflection on our carelessness towards trees in the city. To watch the church elms come down is to stir thoughts of other trees struggling against strangling sidewalks, against soil impoverished or fouled by leaking gas, against a population all too indifferent to their health and beauty and to cause us to ask if Providence will ever see again such splendid trees as those now in their declining years.

These old trees on the church lawn have spanned a crucial period in our history. At the outbreak of the Civil War they had reached maturity. They were, then, strong and upward-looking as the troops came marching home from that war and made an inspiring show in what is now the edge of Exchange place. They were in their prime as the drums beat at the time of the Spanish-American War. And in their premature old age they have looked down upon the men in khaki returning from the greatest of all wars. Their branches have nodded over many a solemn college procession, have whispered smilingly on hundreds of newly-married couples going out from the church into the adventure of life together; and have murmured softly as the mortal remains of many a staid citizen have been carried away to their last resting place.

Surely they must have sorrowed to see the horse almost eliminated from Waterman street by the noisier, less picturesque but more progressive automobile. They have quickened to the laughter of little children for whom the lawn in summer is a playground. They have shaded the weary pedestrian stopping to rest on the inviting wall along the sidewalk. They have known the miracle of the trolley car penetrating the hill on which the city's first settlers built their homes. They have followed the tides of the city's business ebbing from North Main street to Westminster and points west and south. We are sure that they used to tilt their branches backward a little at the odors arising from the old cove. And we are

positive that they rejoiced to see the cove filled in and on its site the beginnings of a civic centre rise. They have watched many thousands of boys leaving the University to take their places in the great school of life. They have seen the School of Design grow from little beginning into a flourishing institution with a great purpose. How, in the night silences, in the glare of electric lights that made the illumination of the whale-oil lamps of their early days seem so dim and feeble, they must have marvelled and shaken their towering heads at the babel of tongues that has become America!

Their going is like the passing of faithful friends. They have been living examples of the truth that they also serve who only stand and wait. The quality of their shade has never been strained. They have given more than they received. Their departure leaves the First Baptist Church grim and stark and murky, with the need of fresh paint painfully obvious. But it likewise gives light and air to the saplings recently planted. If it teaches a greater care of the new trees and arouses a wider interest in all trees throughout the city then these old elms will not have died in vain.—*Providence Journal, January, 1920.*

THE TREES.

Defying time's relentless march, the forests held their sway—
 Through cycles old in numbers bold they kept their proud array;
 But when the woodman's ax was hurled against the pristine tree,
 The Birches drew in little clumps such as you often see;
 They grouped in three's and four's and five's and huddled up in fright,
 They clustered in the fields from fear, and terror turned them white.
 The Hemlock took a firmer hold and tried to stand his ground;
 The sturdy Oak and mighty Elm both quivered at the sound.
 The Maple was a hardy tree and not disposed to yield;
 His leather bark all weather-seared should prove a worthy shield;
 He said: "You shall not strike me down, such efforts I'll resist!"
 Then "knuckles" grew upon his trunk like those upon your fist.
 The Cedar bowed reluctantly above the saddened brook—
 And all the Trees for miles and miles put on a sombre look.
 The lofty Pine began to sway and softly sing and sigh;
 He seemed to say: "The end is near and all my friends will die."
 Then moisture gathered on his bough and laved the earth at dawn,
 And to this day the Pine tree mourns its comrades that are gone.

—John C. Wright.

There is a kind of wealth in trees and birds which defies appraisement. The beauty and comfort of their shade and song are too universal, too illusive for exact valuation, but there is a sense in which they constitute a very real and a very tangible source of public wealth. The practical utilities which they serve are so great as to make their conservation and protection matters of grave public concern. Any nation-wide instruction in thrift must provide for an effort to correct our habits of profligacy and waste of these great natural resources. An intelligent sentiment for the planting and culture of trees and forests must be encouraged. It may prove to be a sound state and national policy to exempt all timber-growing lands from taxation. The constant menace of insect pests to an agricultural state like ours makes necessary the protection of our wild birds through the creation of sentiment and the enactment and enforcement of wise laws.—*Governor Lowden of Illinois.*

TREE SONG.

Mrs. ORMISTON CHANT.

Allegro.

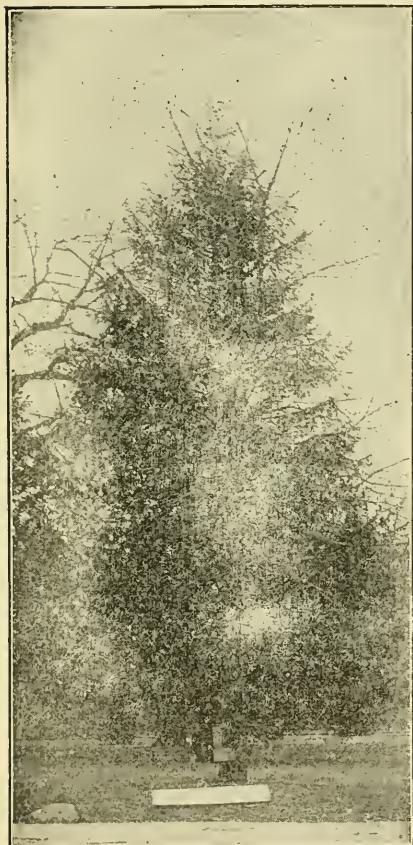
1. The trees are wav - ing to and fro, So are we, so are we, Be -
 2. The trees are point - ing to the sky, So are we, so are we, They
 3. They keep their place by each firm root, So will we, so will we, Keep

neath the wild wind bend - ing low, So do we, as you see. Oh,
 hold their grace - ful heads up high, So will we, as you see. Oh,
 place with firm - ly plant - ed foot, As you see, as you see. Oh,

may we grow like hap - py trees, In shad - ow or in sun, To
 cres. ff

rit.
 bless the world, to help, and please, Till our life - work is done.

"God spake: the hills and plains put on
 Their robe of freshest green;
 Dark forest in the valleys wave,
 And budding *trees* are seen.
 The word of His breath clothes the forest with leaves,
 The high gift of beauty the spring-tide receives."



TREES.

In the Garden of Eden, planted by God,
 There were goodly trees in the springing sod—
 Trees of beauty and height and grace,
 To stand in splendor before His face;
 Apple and hickory, ash and pear,
 Oak and beech, and the tulip rare,
 The trembling aspen, the noble pine,
 The sweeping elm by the river line;
 Trees for the birds to build and sing,
 And the lilac tree for a joy in spring;
 Trees to turn at the frosty call
 And carpet the ground for their Lord's footfall;
 Trees for fruitage and fire and shade,
 Trees for the cunning builder's trade;
 Wood for the bow, the spear, and the fail,
 The keel and the mast of the daring sail—
 He made them of every grain and girth
 For the use of man in the Garden of Earth.
 Then lest the Soul should not lift her eyes
 From the gift to the Giver of Paradise
 On the crown of a hill, for all to see,
 God planted a scarlet maple tree.—*Bliss Carman.*

SHADE.

The kindest thing God ever made,
 His hand of very healing laid
 Upon a fevered world, is shade.
 His glorious company of trees
 Throw out their mantles, and on these
 The dust-stained wanderer finds ease.
 Green temples, closed against the beat
 Of noontime's blinding glare and heat,
 Open to any pilgrim's feet.
 The white road blisters in the sun;
 Now half the weary journey done,
 Enter and rest, O weary one!
 And feel the dew of dawn still wet
 Beneath thy feet, and so forget
 The burning highway's ache and fret.
 This is God's hospitality,
 And whoso rests beneath a tree
 Has cause to thank him gratefully.

—*Theodosia Garrison.*

TREES A FACTOR IN THE NATION'S RESOURCES

A crutch would have seemed more natural than a mattock, for the man was very old and bent and wrinkled, and his hands trembled even when he leaned on the mattock handle to speak to the young man in the road. Yet he was digging lustily at a deep hole, preparing to plant a young oak. The young man pulled up his horse at the yard gate. "Grandsire Green," he said, "it would be natural for me to plant trees because I might live to enjoy their shade and their beauty, but you—why don't you go enjoy yourself and leave that sort of hard work to us younger fellows?"

"Well, my boy," replied the old man, "I found trees here when I came into the world more than 80 years ago, and when I go out of the world I want to leave

some trees here for the people who are to follow me." Why should not every man feel the same way about it? "Education is a debt due from the present to future generations" Trees are just as much so. The great trees that one stands reverently in awe of are not attained in a lifetime. They are creatures of the centuries. The grandchildren of our grandchildren can know nothing of the sublimity and the charm of the kind that grow in the open unless we plant them.

No community can afford to neglect Arbor Day. Nothing helps more to beautify a city or town than trees, and few things so educate the people in public spirit and foresight as the care of trees. The celebration of Arbor Day by the planting of trees is an assumption of an all-the-year-round responsibility. There is quite as much need for the care of trees and shrubs as for actual planting.

Arbor Day has been the means of arousing interest in roadside plantings, both in city and country. Some objection has been made to trees along the roadside on the ground that they hinder drying out after wet weather. This holds good if the road is poorly built; but trees are actually an aid in keeping a well-built road dry, if they are not planted too close. The roots, by constantly taking in water, assist in drainage, and the tops, by breaking the force of driving rains, prevent washes in the roadway. The most important use of trees by the roadside, however, is the prevention of dust. Dust is the cementing material in macadam roads, and if it is loosened and blown away, the breaking up of the road is hastened.

What the trees do for the roads they do also for the forested hillsides. Wherever there are no forests on the hills and mountains the rain and melted snow rushes off in a torrent, digging out great gullies and carrying away the fertile soil. Where there is a forest the trees protect the soil from the beating of the rain; the roots lead the water deep into the ground, to be stored up there and gradually fed out by springs all the year round; the leaf litter absorbs and holds the water like a sponge; the trunks and roots prevent the rapid run-off of the water and bind the soil together. The forest is of utmost benefit in preventing both floods and drought; it is in reality a natural storer of water. It is highly desirable, often imperative, therefore, that the watersheds of navigable streams and those upon which towns, cities, irrigation projects, and water-power plants depend for their supply should be forested.

NATURE.

The bubbling brook doth leap when I come by,
Because my feet find measure with its call;
The birds know when the friend they love is nigh,
For I am known to them both great and small;
The flowers that on the lovely hill-side grow
Expect me there when Spring their bloom has given;
And many a tree and bush my wanderings know,
And e'en the clouds and silent stars of heaven;
For he who with his Maker walks aright
Shall be their lord, as Adam was before;
His ear shall catch each sound with new delight,
Each object wear the dress which then it wore;
And he, as when erect in soul he stood,
Hear from his Father's lips, that all is good.—*Jones Very.*

"Thou shalt not destroy the trees—Thou shalt not cut them down, for the tree of the field is man's life."



CHERRY TREES IN BLOSSOM.

THE RANGER'S LIFE.

Nights that are spent in the open,
Under the whispering trees;
Slumber that's sweet and dreamless—
Lullabys sung by the breeze,
Waked by the first red sunbeam
Unto no day of strife—
Waked to a day of pleasure—
Such is the ranger's life.

Over paths flecked with sunshine,
Threading the tree-lined ways;
Fording a snow-born streamlet
There where the big trout plays;

Surprising the elk at the dawning,
The bear at his clumsy play—
Feeling the heart-beat of Nature—
Such is the ranger's day.

Think you the city can call him?
What charm has the marketplace?
Why should he turn from the mountains,
Inviting, from peak to base?
Town's but to dream of at even,
When camp fire smoke curls high.
So lives the forest ranger
Under the western sky.—*Arthur Chapman.*

THE FRIEND OF SPRING.

When the world wakes up from slumber and the daffodils appear,
And the sky gets blue above me and I know the spring is here;
When the birds begin to chatter and there's something in the air
Which sets a man to thinking of the garden waiting there;
It is then the plants and roses and each budding vine and tree
Seem just like good old neighbors that I've waited long to see.
Oh, it's like the break of morning, and there's someone that you know
Passes down the street and hails you, and you shout a glad "Hello!"
Or it's like the friendly greeting that you give to people when
They've been away for weeks and weeks and just got home again;
Or at least that's how I view it, for it really seems to me
That I've got to give a welcome to every bud I see.
I go into the garden and I watch each plant and vine
For the signs of their awakening, for they're all good friends of mine,
And I bend above the roses and I greet them with a shout
Of delight there's no mistaking when I find them budding out;
Oh, I'm mighty glad to see them, and I want to let them know,
And I think they understand it when they hear me call "Hello!"

—*Edgar A. Guest*

O fair mid-spring, besung so oft and oft,
How can I praise thy loveliness now?
Thy sun that burns not and thy breezes soft
That o'er the blossoms of the orchards blow,
The thousand things that 'neath the young leaves grow,
The hopes and chances of the growing year,
Winter forgotten long and summer near.—*Morris.*

The murmuring grass and waving trees—
Their leaf-leaps' sound unto the breeze—
And water-tones and tinkle near,
Blend sweet music to my ear;
And by the changing shades alone,
The passage of the hours is known.—*Street.*

PROSPECTIN'

Up the mountain and through the burn
We climbed. An' 'mongst the brush an' fern,
An ole man drove his maddock home,
An' slapped a tree in the gapin' loam.
"Mornin', Father. What's the game?"

"Plantin' trees," the answer came.
"You don't 'spect to live to see
The standin' timber, do ye, say?"
He looked reflectin', down the hill:
"Wal, no. But, thunder, some 'un will."

—*J. R. Simmons.*

FAMILY TREES.

You boast about your ancient line,
But listen, stranger, unto mine:
You trace your lineage afar,
Back to the heroes of a war
Fought that a country might be free;
Yea, farther—to a stormy sea
Where winter's angry Pilgrim Fathers crossed.
Nay, more—through yellow, dusty tomes
You trace your name to English homes
Before the distant, unknown West
Lay open to a world's behest;
Yea, back to days of those Crusades
When Turk and Christian crossed their blades.
You point with pride to ancient names,
To powdered sires and painted dames;
You boast of this—your family tree;
Now listen, stranger, unto me:
When armored knights and gallant squires,
Your own beloved, honored sires,
Were in their infant's blankets rolled,
My father's youngest sons were old;
When they broke forth in infant tears
My fathers' heads were crowned with years,
Yea, ere the mighty Saxon host
Of which you sing had touched the coast,
Looked back as far as you look now.
Yea, when the Druids trod the wood,
My venerable fathers stood
And gazed through misty centuries
As far as even Memory sees.
When Britain's eldest first beheld
The light, my fathers then were old.
You of the splendid ancestry
Who boast about your family tree,
Consider, stranger, this of mine—
Bethink the lineage of a Pine.—*Douglas Malloch.*





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